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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,257	02/27/2004	Christian Joachim Keidel	APV31618A	1296

7590 11/17/2006
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EXAMINER

OMGBA, ESSAMA

ART UNIT PAPER NUMBER

3726

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/787,257

Applicant(s)

KEIDEL ET AL.

Examiner

Essama Omgba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6,7,10,11,13-16,18,19,23-25,28,29 and 32-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6,7,10,11,13-16,18,19,23-25,28,29 and 32-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6, 7, 10, 13, 14, 19, 23-25, 28, 29, 32, 33, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Warner et al. (US Patent 6,569,542).

With regards to claims 1, 6, 7, 10, 13-16, 28, 29, 33 and 34, Applicant, at pages 1-3 of the specification to be known as AAPA, discloses a method for producing an integrated monolithic aluminum structure for a part of a wing skin or frame structure for an aircraft wherein an aluminum alloy plate with a thickness in the range of 15 to 75 mm is bent to form a predetermined shaped and after the bending operation, machining the plate to produce the monolithic structure. AAPA does not disclose heat-treating the shaped structure comprising artificially ageing the shaped structure to a T6, T79, T78, T77, T76, T74, T73 or T8 temper prior to machining. However Warner et al. teaches producing integrated monolithic aluminum structure by providing an aluminum alloy plate with a predetermined thickness, the plate having been stretched in a range greater than 1.5% after quenching (col. 4, lines 11-32), bending the alloy plate to obtained a predetermined shaped structure and heat-treating the shaped structure to artificially age the shaped structure to a T6 temper condition (col. 4, lines 37-42), and machining the

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shaped structure (col. 3, lines 36-37 and col. 4, lines 59-62). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have produce the monolithic structure of AAPA, in the manner taught by Warner et al., in order to avoid distortion resulting from the bending and machining and the internal residual stress.

For claims 15 and 16, Applicant should note that it is within the general knowledge of one of ordinary skill in the art to provide the shaped structure with an appropriate pre-machining thickness that would satisfy the desired final thickness of the finished structure. Furthermore the heat-treatment disclosed by Warner et al would bring the distortion to an acceptable value.

For claims 19 and 23-25, see column 4, lines 57-60 of Warner et al. Regarding the recitation of the particular distortion target of less than 0.13 mm, Applicant should note that it is within the general knowledge of one of ordinary skill in the art to set acceptable working parameters for the desired final product, and in as much as the claimed method and product are obvious over AAPA/Warner et al. as shown above, it would have been obvious to one of ordinary skill in the art that the claimed longitudinal distortion and lack of differing inner stress levels would be achieved by the method of AAPA/Warner et al.

For claim 32, see column 4, lines 36-37 of Warner et al.

3. Claims 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA/Warner et al. as applied to claim 1 above, and further in view of Quist et al. (US Patent 4,305,763).

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AAPA/Warner et al. discloses a method for producing an integrated monolithic aluminum structure as shown above except for the claimed composition of the aluminum alloy. However Quist et al. teaches a composition of aluminum alloy within Applicant's claimed range, see column 2, lines 4-18. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used an aluminum alloy with the claimed composition since it has been held that "a prior art reference that discloses a range encompassing a somewhat narrower claimed range is sufficient to establish a prima facie case of obviousness." *In re Peterson*, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003), see MPEP § 2144.05.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 6, 7, 10, 11, 13-16, 18, 19, 23-25, 28 and 32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read 'Essama Omgba', is positioned above the printed name.

Essama Omgba
Primary Examiner
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eo
November 13, 2006